

# Wetlands are Wonderful

## Correlation to the 2012 NC Essential Standards

### Grade 3

#### Theme and Description: The Ecosystems (Plants)

##### 3.L.2 Understand how plants survive in their environments.

*3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.*

*3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay, and humus) of soil determine the ability of soil to support the growth and survival of many plants.*

While exploring the definition of wetlands and the many forms they can be found in students will realize that different plants can live and grow in different environments. These environments are determined by the water content of the soil and how the plant uses and adapts to the water. The student will learn about different plants that only survive in wetland ecosystems. The student will also learn about soils found in wetland ecosystems and how they differ from soils found in other ecosystems.

#### Theme and Description: The Earth's Surface and The Solar System

##### 3.E.2 Compare the structures of the Earth's surface using models or three dimensional diagrams.

*3.E.2 Compare Earth's saltwater and freshwater features (including oceans, seas, rivers, lakes, ponds, streams, and glaciers).*

Through explorations of wetlands the student will learn the characteristics of the bodies of water based on their location and water type. Students will learn about wetlands that have both fresh and saltwater that then combine to form brackish water. The student will learn about the different organisms that can live in these wetlands.

#### Theme and Description: Economics and Geography

##### 3.E.1.1 Explain how location impacts supply and demand.

##### 3.E.1.2 Explain how locations of regions and natural resources influence economic development (industries developed around natural resources, rivers, and coastal towns.)

##### 3.C&G.2.2 Exemplify how citizens contribute to the well-being of the community's natural environment.

##### 3.G.1.3 Exemplify how people adapt to, change and protect the environment to meet their needs.

Wetlands can have a huge impact on an area's economy. Students will learn what products come from wetlands, how they are grown or harvested, and how the community takes care of the natural resources surrounding the wetland environment.

## Grade 4

### Theme and Description: What/Where is North Carolina?

**4.G.1** Understand how human, environmental and technological factors affect the growth and development of North Carolina.

Students will be able to identify the different types of wetlands found in North Carolina and how humans impact these natural resources.

### Theme and Description: Economics

**4.E.1** Understand how a market economy impacts life in North Carolina.

Through learning about the products that wetlands in North Carolina produce, students will realize the role this industry plays in North Carolina.

### Theme and Description: Life Science

**4.L.1** Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.

Students will learn through changes in the wetland environment will have many effects. An increase in consumers can cause an imbalance in the food chain while a demand from consumers will also cause the ecosystem instability.

## Grade 5

### Theme and Description: Ecosystems

**5.L.2** Understand the interdependence of plants and animals with their ecosystem.

**5.L.2.1** Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, lakes and ponds, forests, and grasslands.

**5.L.2.2** Classify the organisms within an ecosystem according to the function they serve: producer, consumer, or decomposer.

**5.L.2.3** Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

The student will learn that wetlands are an aquatic ecosystem and will be able to identify estuaries, salt marshes, oceans, lakes, and ponds by their characteristics. Wetland studies will also allow the student to be able to identify producers, consumers, and decomposers as well as differentiate between food webs, food chains, life cycles, and the energy pyramid.

## Grade 6

**Theme and Description:** Ecosystems

**6.L.2 Understanding the flow of energy through ecosystems and the responses of populations to the biotic and abiotic factors in their environment.**

Through the study of wetlands, the student will be able to determine how abiotic factors affect the life in an ecosystem such as how organisms grow, survive, and the food chains and webs necessary for that life.

**Theme and Description:** Language Arts

**6.L/6.W Language/Writing**

Students will use the information given during a presentation by Soil & Water Education Coordinators and be able to research the topic. Once information is gathered the student will be able to write a 30-500 word essay providing either an argument or an informative point of view. The student should be able to use proper grammar and language functions.

## Grade 7

**Theme and Description:** Language Arts

**7.L/7.W Language/Writing**

Students will use the information given during a presentation by Soil & Water Education Coordinators and be able to research the topic. Once information is gathered the student will be able to compose a 4-6 minute speech providing either an argument or an informative point of view. The student should be able to use proper grammar, language functions and oral presentation skills.

## Grade 8

**Theme and Description:** Ecosystems

**8.L.3 Understand how organisms interact with and respond to the biotic and abiotic components of their environment.**

Through the study of wetlands, the student will be able to determine how abiotic factors affect the life in an ecosystem such as how organisms grow, survive, and the food chains and webs necessary for that life. The student will also how these factors affect the populations in the ecosystem.

**Theme and Description:** Language Arts

**8.R/8.W/8.L Reading/Language/Writing**

Students will use the information given during a presentation by Soil & Water Education Coordinators and be able to research the topic. Once information is gathered the student will be able to write a 4-6 minute speech providing either an argument or an informative point of view. The student should be able to use proper grammar, language functions and presentation skills.